

'Some Clinical Experiences with Appendicitis'

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# Some Clinical Experiences with Appendicitis

During the last 4 years it has been my lot in Hospital practice to treat 32 cases of Appendicitis. Eleven of these required surgical measures for their relief or cure and with the remainder medical and dietetic measures sufficed. My experiences have led me to advise operation for the removal of the Appendix after two attacks of anything like marked severity.

Six of my cases are in my opinion more worthy of note than the others, principally because of various complications some of which were very marked and disease of the Appendix as the cause of the trouble was not suspected nor recognized for some considerable time.. In some of the cases, especially those associated with suppuration prior to operative procedure the length of illness has been very prolonged and in some the result has been disastrous .

The more tedious of those which recovered were those with such dense adhesions between appendix , intestines and abdominal walls that ligatures were required in separating them, my experience being that in the presence of pus, - ligatures - Sulpho-chromic Gut was the material most frequently used - does not absorb, and that in spite of the most rigid antiseptic and aseptic technique, after the primary cause of the suppuration has been removed -the



ligature itself acts as an irritant and keeps the suppurative process up until it is either removed or comes away with the discharge.

In some of ~~my~~ selected cases there were to me great difficulties in arriving at a correct diagnosis at any rate in an early stage, this no doubt along with uncertainty as to the best treatment to pursue helped to make these cases so prolonged.

#### Case No<sup>r</sup> 1.

A young farmer 25 years of age, with a good family and personal history was first seen suffering from acute pains in right side of abdomen with point of greatest intensity over 11th and 12th ribs posteriorly, there was persistent bilious vomiting also constipation. Temperature 101F Abdomen tympanitic and pulse rapid. Under diet rest and small doses of Calomel and Bismuth Salicyl, the vomiting ceased and bowels moved and tympanites disappeared, but in two days patient became jaundiced, this settled down in 3 days and recovery gradually set in, patient being discharged quite well in 29 days. He returned a year following complaining of severe pain in right hypochondriac region having had two slight but similar attacks of pain feverishness and vomiting since last seen. This second attack for which he was treated in Hospital commenced 2 days before admission with feelings of malaise, vomiting of bilious matters

On admission abdomen was tense Temperature 102 F  
 tongue furred, pulse 100 and running, and although  
 there was constant pain, there were attacks of greater  
 severity, which appeared to resemble renal colic, as it  
 passed from right hypochondriac region into scrotum  
 and drew up the testicles. What the cause of his trouble  
 was and what was the best treatment to pursue was now a  
 serious question to me, as his former attack resembled  
 Biliary Colic and the present one Renal Colic.

While debating this question- rest, milk diet and calomel  
 and Bismuth Salicyl was ordered, also small carefully  
 administered Soap and water enemata to relieve the bowels  
 and occasionally when the pain was severe a little opium.

Under this treatment his pain and malaise gradually settled  
 down, and in eight days had disappeared; but now to my  
 surprise on examination of right iliac region which  
 previously had not shewn any suspicious symptoms except  
 that on the fifth day a severe attack of pain had set in ,  
 -- there was dulness and tenderness over Mc Burney's  
 point, and examination per Rectum revealed a fulness in  
 the region of the Appendix , evidently a collection  
 of pus. As these signs became more marked patient was  
 anaesthetised, and an incision 2 inches long made over  
 Mc Burney's point and a large quantity of very foetid  
 pus allowed to escape.

Drainage tubes were placed into the wound for 10 days and a very copious discharge of pus went on . No attempt was made to find the Appendix for fear of breaking down adhesions and infecting the general peritoneal cavity. After the operation the patient's symptoms gradually subsided and he was discharged with a sound scar 4 weeks after the making of the incision, and has remained in perfect health since.

#### Case No 2.

That of an actor aged 32, who had led a rather dissolute life. From his history I gathered that a year before coming under my care he had evidently had an attack of Appendicitis with a relapse, and was under medical treatment for a month . When first seen by me he had been ill 4 days with pains in right iliac region and persistent vomiting, due he considered to taking a cold drink when over-heated. He had a temperature of 102F when first examined, also pain and tenderness in right iliac region, furred tongue and constant vomiting and constipation. The treatment pursued was Small soap and water enemata , Calomel and Bismuth Salicyl , also Hot fomentations to the painful area. The symptoms gradually subsided and patient was able to resume his ordinary occupation in 3 weeks. Five months after this he was re-admitted with a return of his previous symptoms and these again subsided under

similar treatment in 3 weeks. He was now advised to have his Appendix removed but refused. A month following he was again re-admitted with another recurrence of his previous symptoms, and on this occasion a distinct tumour could be felt in right iliac region by palpation on belly wall and also per rectum. Under medical treatment as before he was practically well in a few days, but during the remainder of his treatment --a period of 6 months-- he steadily refused any operative treatment on his Appendix, and had constant recrudescences of his symptoms every few days with the following complications. Five weeks after the commencement of the third attack for which he was treated in Hospital, he began to complain of pain in the right side of his chest, and his temperature which with the recurrence of any pain around the appendix generally rose to 101F now went up to 103F and occasionally 105F. Physical examination revealed dulness, pleuritic friction &c over the base of Right Lung from angle of Scapula to base. During the next 4 weeks patient had occasional rigors, and marked malaise and there was evidence of a collection of pus in the right pleural cavity or lung. Exploration with a needle on several occasions failed to obtain any-- when suddenly after a few days of apparent improvement -- patient suddenly vomited and coughed up a large quantity of muco-purulent

offensive smelling blood-stained matter. This continued for a fortnight when the expectoration gradually ceased and the dulness and friction a right base slowly disappeared and normal resonance and breath sounds re-appeared. After this cleared up he began to complain of pain behind the right ear in the Mastoid area, and his temperature which had remained at normal after the discharge of the lung abscess, began to rise again, especially in the evening. A soft fluctuating swelling appeared in the painful area, this was incised and pus allowed to escape, and carious bone could be felt with a probe. For the following 2 months there was a constant free purulent discharge from this incision, occasionally small pieces of necrosed outer table came away with the discharge.

Patient's condition during this time was most miserable, insomnia, anorexia, depression of spirits and constant headache being most marked. There was also a constant evening rise of temperature. Patient finally but tardily consented to have an anaesthetic and a large incision was made behind the right ear and a flap of scalp tissue reflected up. On examination it was found that the greater part of the squamous portion of Right Temporal Bone, also part of Occipital and the posterior inferior angle of the Right Parietal were involved in a necrotic

process. Large scales of bone lifted up and remained attached to the scalp flap, pus oozed out in all directions from between the skull and Dura Mater, and uncontrollable haemorrhage from a vein at the base of the Mastoid Process occurred rendering the patient rapidly pulseless. The wound was rapidly douched, the bleeding area plugged and the scalp flap stitched up. Strenuous efforts were made to revive the patient but although he recovered from the anaesthetic he gradually sank and died within an hour.

A postmortem examination was made--- the right lateral area of the skull was found to be necrosed and readily lifted off with the scalp tissues. The Dura Mater was thickened and covered with a purulent exudation, but none was found beneath the Dura. The Brain in the affected area was a little congested but otherwise healthy. In the Thoracic cavity there was no sign of disease except at base of right lung there appeared to be a little thickening and the pleura was adherent to the diaphragm. In the abdominal cavity there was evidence of chronic inflammation, and adhesions between intestines and abdominal walls in right iliac region were marked. The tip of the Appendix was swollen and had a gangrenous appearance and was adherent low down in the pelvic cavity to the Rectum.



*Case No 3.*

*This case was similiar in many respects to No 2 and like it ended in a fatal issue. This patient was a young man aged 27, a carter, who first came under my care after having two severe and several slight attacks of Appendicitis within the previous 6 months. He was well when first seen and was admitted in order to have the Appendix removed. While awaiting operation he was seized with an attack of pain, also constipation, but no rise of temperature. This subsided in the course of a few days and patient was anaesthetised and the usual incision made in the right iliac region. Numerous dense adhesions were met with and when separating these about a drachm of pus was met with and carefully mopped up. The bowel was very congested and the appendix found to be swollen inflamed and bound down to the iliac fascia, as the patient was taking the anaesthetic badly and there was every prospect of a very prolonged operation it was deemed advisable not to proceed, so Iodoform Guaze drains were inserted and the abdominal wound stitched up in layers. Sulphochromic Gut being used for the peritoneum and muscles and Silkworm Gut for the skin. Patient recovered well from the immediate effects of the operation and was discharged in 5 weeks apparently well except for obstinate constipation.*

Three weeks after leaving the hospital he began again to become uneasy and eventually pain and discomfort in the right iliac region set in, and he was re-admitted 48 hours after the re-commencement with acute pain in the region of the appendix, also under about the middle of the lower border of the liver. A tumour could be felt in the region of the Gall Bladder. The temperature at this time was 99,8 F he complained especially of very acute pain shooting from this tumour towards the scar of his operation wound. The pulse rate was 98 this was very quick for patient as normally he had a markedly slow pulse. During the following week patient was very uneasy, temperature 100F every evening and 99F in the morning. The abdomen was distended and the bowels acted only when enemata were administered. At end of first week a bulging appeared at about the middle of the operation scar, this burst and a quantity of pus escaped, but the tumour in region of the Gall Bladder did not diminish in size. Pulse now 114. Five days after this period of comparative ease he began to suffer from pain at base of right lung posteriorly and dulness and pleuritic friction were observed. Puncture with an exploring needle did not help in the diagnosis. Four days after this he began to expectorate blood-stained offensive smelling pus. Suppuration from the sinus in the scar ceased and the tumour under the liver

diminished in size. In a few days pain dulness on percussion and pleuritic friction and tubular breathing became noticeable over the left lung anteriorly. Respirations became quick shallow and short.

From this time up to his death -- a period of 6 weeks his condition gradually became worse. He complained of general abdominal pain, also pain on both sides of chest on respiration. The foul smelling expectoration continued. He lost all desire for food and tonics were found to be useless. Sleeplessness was very marked. The abdomen was occasionally tympanitic, but all pain tenderness and discomfort disappeared from the right iliac region. In left pleural cavity pyo-pneumo-thorax developed and patient gradually died from exhaustion.

No post mortem examination was obtainable.

On considering this case after it became hopeless there is no doubt that the most successful treatment after the failure to remove the appendix and the appearance of the abscess under the liver --- would have been to have cut down on and packed off the abscess with gauze and to have drained it.

## Case No 4.

A boy aged 14, previous health good, was admitted suffering from pain and swelling over right Ilium rather posteriorly. Present illness commenced two months before admission with pain and swelling in the right iliac region. He was medically treated for this, and was confined to bed for seven weeks. About 6 weeks after being allowed up, pain and tenderness appeared over right Ilium, rather below the crest and on the posterior aspect, there was redness but very little swelling, but on palpation with one hand on abdomen over right iliac region and the other over the tender area there seemed to be an indefinite fluctuation, also a feeling of resistance in the right iliac fossa. On digital examination of the rectum no definite information was obtained. Patient did not suffer any malaise nor was there any rise in the pulse rate or temperature. He was kept in bed for 3 weeks and Boric poultices applied locally. As the local tenderness, redness and swelling became more marked, an incision was made under an anaesthetic into the swelling and a quantity of pus allowed to escape. A sinus leading towards the abdomen and downwards towards the Caecum was detected and drainage tubes inserted. Patient was kept in bed for 4 weeks and the quantity of discharge gradually lessened

but did not cease altogether---a sinus 4 inches long leading down to the Appendix remaining. This sinus was curetted several times with and without general anaesthesia patient's condition remained good all this time, there being no rise of temperature, no pain nor malaise.

As the sinus continued discharging and the feeling of resistance could still be noticed on palpation it was decided that the peritoneal cavity should be opened and the Appendix removed. After persevering with the sinus for 6 months this operation was performed. The Appendix was found in a mass of adhesions which were separated and ligatured with great difficulty, there being profuse oozing of blood. The Appendix itself was matted down, the tip was enlarged and ulcerated and its position was found to be at the end of the old sinus that had been giving so much trouble. The Appendix was ligatured and amputated and removed, the stump being touched with Nitric Acid. The surrounding tissues were thoroughly douched with a weak Iodine solution and the wound stitched up. The operation was rather prolonged and told severely on the patient for a few days, he was jaundiced for 3 days succeeding the operation. The abdominal incision healed kindly, but the sinus continued discharging slightly for the next 6 months. About 5 months after the removal of the Appendix a Sulpho-chromic

gut ligature was found in the discharge, evidently one used for one of the dense adhesions. After this the sinus healed rapidly and patient was discharged in the best of health and free from all discomfort.

#### Case No 5

This was the case of a girl aged 30 who was admitted suffering from an Abscess in the Sacral region. This patient had a good family and personal history except that for some years she had suffered from attacks of pain in right thigh posteriorly, called by her medical advisors Sciatica. The first really severe attack began a year before admission and lasted for 3 months and patient has had several less severe attacks since. When a child she has an indistinct recollection of accidentally receiving a blow in the right iliac region, and for some years suffered from periodic attacks of pain in this region, having occasionally to walk the floor at night instead of sleeping, but she did not receive any medical attention for this.

The illness for which she came under my care commenced 5 weeks before admission and was apparently one of her attacks of Sciatica, she was treated by a medical man for this and he considered it was Ovaritis. Shortly after this a swelling appeared over the body of the Sacrum superficially. This gradually increased in size and was

the source of a great deal of pain and inconvenience. An incision was made over this and a large quantity of sanguino-purulent matter allowed to escape-- the abscess cavity could be traced along the right border of the Sacrum and Coccyx. Drainage tubes were inserted and the wound dressed regularly, patient's condition improved all malaise, rise of temperature &c disappeared, but a purulent discharge continued, so a month after patient was anaesthetised and several incisions and counter incisions made in the sacral and gluteal regions and pus which had been burrowing under the gluteal muscles was given vent. No evidence of diseased bone nor of any primary cause for the condition was detected. The incisions gradually healed but one remained discharging at about the middle of the right border of the sacrum, and from this a sinus led down to the coccygeal region. Occasionally there was a suspicion that a flexible probe passed on to the anterior surface of the sacrum. Patient remained in good general health except for obstinate constipation. In four months patient was again anaesthetised and the sinuses opened up and examined and a quantity of tubercular looking material curetted away. On microscopic examination of this no Tubercle Bacilli could be detected. Although a discharging sinus still remained after this last procedure, there was a distinctly lessened quantity

and patient was able to walk about, but after a few months she began to complain of shortening of right leg and a sensation of involuntary flexion of the thigh which required an effort on her part to prevent. Tenderness and resistance in right iliac region was for the first time complained of and noticed, and the Appendix Vermiformis as the cause of the condition was for the first time suspected. Disease of the Hip, Sacro-iliac disease &c had all been put out of account.

Patient was advised to have Appendix removed and accordingly an incision was made in the right iliac region. The Right ovary was found to be enlarged and Cystic and was removed. Many adhesions were encountered and ligatured and the Appendix was after some considerable trouble found coming off from the Caecum near the Ileo-caecal valve and running down to the brim of the pelvis. It was enlarged thickened and firmly bound down, and a probe passed into the sinus at the right border of the Sacrum was found to pass to an ulcerated patch near the tip of the Appendix. The diseased organ was amputated near the Caecum and removed. The abdominal wound closed after the insertion of a Guaze drain. The posterior sinus was curetted and plugged with guaze.

The abdominal wound healed up by first intention, but the posterior sinus continued to discharge, and in the



course of the next few months several Sulpho-chromic ligatures appeared with the discharge.

Patient's general condition improved immensely, weight increased and her menstrual functions which had been in abeyance for 18 months reappeared. Eight months after the operation for the removal of the Appendix patient was discharged there still being a small sinus at the right border of the Sacrum evidently due to an unabsorbed ligature.

#### Case No 6.

That of a young farmer aged 22 who had had frequently recurring attacks of Appendicitis of a very intense nature during the previous 6 months. On admission he had tenderness in right iliac region and a tender swelling could be palpated in the region of Mc Burney's point . He was anaesthetised and the peritoneal cavity opened by the usual incision and after meeting with a considerable number of adhesions the Appendix was found firmly bound down and passing into the pelvic cavity , it was resected and removed, the caecal end being touched with pure Carbolic Acid. The abdominal wall was stitched up in layers. The wound did not heal by first intention but commenced suppurating freely on the 5th day , and patient complained of severe pain in the right iliac region around the wound. This condition went on for the next five weeks , although the abdominal wound improved and

and granulated firmly up except for a small sinus about its middle, patient continued to have acute attacks of severe pain lasting for several hours associated with a rise of temperature and pulse rate, These attacks recurred irregularly every few days. Patient was very constipated and required constant attention with enemata. As a collection of pus was feared, patient was again put under the influence of an anaesthetic and the peritoneal cavity re-opened , the incision passing across the middle of the previous scar. A very dense adhesion firmly fixing a coil of intestine to the anterior wall was encountered this was relieved and several minor ones separated. No collection of pus in spite of a very rigid search was found, so the incision was stitched up. This healed by first intention except a small portion which granulated Patient was discharged free from pain and in good health 5 weeks after his second operation.

Of the 32 cases that have come under my care, 5 only were females. The most common age has been between 14 and 26. The youngest patient treated was 12 years and the oldest 44.

Simple medicinal measures sufficed in the great majority of the cases, and most were known only to have had one or at most two attacks. The treatment pursued was absolute, <sup>and</sup> careful dieting, Calomel in small repeated doses, also Salicylate of Bismuth. Sometimes hot fomentations were applied to the painful area if comforting to the patient. Simple soap and water enemata were carefully administered to relieve constipation. Opium was only administered if the pain was excessive.

Three patients came under treatment with an acute localized peré-typhlitic abscess, and these were treated by immediate incision, two recovered well. The ~~IX~~ third before operation felt and heard something give way in the right iliac region internally, evidently the bursting of an abscess and the infection of the general peritoneal cavity, an incision was made immediately, but general septic peritonitis had been set up, and the patient rapidly succumbed. Removal of the Appendix during a quiescent period after one or at most two attacks of trouble, has

been comparatively easy , and has given splendid results. Also the result has been most pleasing in some very chronic frequently recurring cases, one especially who had had 17 acute attacks in a year, which had given his medical advisor considerable anxiety, and who had been compelled to give up his occupation as a telegraphist and his recreation as a rower; was enabled after the removal of the offending organ , to resume his ordinary duties and pleasures.